

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 CARRIBEAN ENVIRONMENTAL PROTECTION DIVISION CITY VIEW PLAZA, SUITE 7000

#48 165 RD. KM 1.2 GUAYNABO, PR 00968-8069

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Ms. Irma López **Executive Director** Environmental Compliance, Health, and Occupational Safety Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 San Juan, P.R. 00916-7066

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Re:

Reconnaissance Inspection

Guanica Wastewater Treatment Plant NPDES Permit Number PR0020486

Dear Ms. López:

On April 29, 2021, the United States Environmental Protection Agency (EPA) conducted an offsite Reconnaissance Inspection (RI) at the above referenced Puerto Rico Aqueduct and Sewer Authority's (PRASA) Wastewater Treatment Plant (WWTP) located in Guanica, Puerto Rico. The RI was conducted pursuant the authority contained in Section 308 of the Clean Water Act, 33 U.S.C. § 1251 et seq., 40 CFR § 122.41(a)(2), & 1, 2, 3, and in accordance with Agency wide acceptable guidance and procedures. PRASA was represented by Amalio Quiros, Plant Operator; Edgardo Jorge, Plant Operator; Rosalia Torres, Environmental Compliance Specialist; and Denny Richardson, Plant Supervisor.

Enclosed you will find the inspection report. The RI report indicates the noncompliance items or deficiencies which should be corrected to ensure compliance with the Clean Water Act and the National Pollutant Discharge Elimination System ("NPDES") Permit. There are also certain areas of concern which are items that could be improved for better operation of the facility. Within ninety (90) calendar days of receipt of this letter, please respond with the actions that PRASA has taken or will take to address the deficiencies included in the attached Water Compliance Inspection Report.

Should you have any questions feel free to contact Miguel A. Batista, Environmental Engineer, at (787) 977-5823.

Sincerely,

JAIME GELIGA Jaime A. Geliga, Chief

Digitally signed by JAIME GELIGA

Municipal Water Program Branch

Caribbean Environmental Protection Division

ODE (- 60574

Enclosure

cc. Annette Feliberty, DNER (w/Enclosures) Gloria Arroyo, PRASA

NPDES Inspection Report

RECONNAISSANCE INSPECTION

Facility Name:

Guanica WWTP

NPDES Permit Number: PR0020486

Permit Status:

Active (02/01/2008 – 01/31/2023)

PRASA representative:

Amalio Quiros, Plant Operator Edgardo Jorge, Plant Operator

Rosalia Torres, Environmental Compliance Specialist

Denny Richardson, Plant Supervisor

EPA Inspector:

Miguel A. Batista, Environmental Engineer

I. **BACKGROUND**

A Reconnaissance Inspection (RI) was conducted on April 29, 2021 at the Guanica Wastewater Treatment Plant (WWTP). The RI consisted of telephonic interview to discuss the purpose of the inspection and to request information about the facility, review the operational and maintenance conditions, and a closing interview to discuss preliminary findings.

II. FACILITY DESCRIPTION AND OPERATOR'S LICENCE STATUS

The Guanica WWTP is a secondary treatment plant. The facility consists of two treatment modules. One module is a 0.5 MGD activated sludge conventional package plant (Old Plant), and the second module is a 1.25 MGD Biological Nutrient Removal (BNR) treatment plant (New Plant). At the time of the CEI, the new plant was out of service. The old plant was in service.

At the time of the inspection, Mr. Amalio Quiros and Mr. Edgardo Jorge were acting as Plant Operators for the Guanica WWTP. Mr. Quiros has obtained the certification as a WWTP Operator Level IV, license # 2099, which expires on April 21, 2023. Mr. Jorge has obtained the certification # 2932 as a WWTP Level IV. Such certification expires on May 22, 2023.

III. COMPLIANCE STATUS WITH CONSENT DECREE (CD)

As part of the Preventive Maintenance Program (PMP) minimum requirements required by the CD (CD 3:15-cv-02283-JAG, signed on September 15, 2015), the Guanica WWTP is implementing the program (Appendix U) with some deficiencies. PRASA must maintain all facility's equipment in very good operational conditions in order to comply with the NPDES Permit and CD's Operation and Maintenance Clauses.

IV. <u>INSPECTION FINDINGS</u>

A. Previous Observations:

Findings during the October 31, 2019 CEI	Status at the time of the Off-Site RI on April 29, 2021
1. The comminutor was out of service.	Replaced by a new unit on 05/14/2020.
2. Degritter's were out of service.	Not corrected. Under rehabilitation project.
3. The degritter's pipeline was corroded.	Not corrected. Under rehabilitation project.
4. The sludge belt filter press was out of service.	Corrected on 01/15/2021.
5. The Alternate Power Unit (APU) was out of service, its transfer switch was damaged.	Corrected on 12/02/2019.
6. An air leak was detected at the Biological Nutrient Removal unit. (New Plant)	Not corrected. Under rehabilitation project.
7. Corrosion-related issues throughout the facility were observed as in previous inspections.	Not corrected. Under rehabilitation project.
8. The clarifier's arm # 2 had no rubber. (New Plant)	Corrected on 04/12/2021.
9. Clarifier # 2 appeared to be unleveled, some joints at the "V-type" weirs were also broken. (New Plant)	Corrected on 04/12/2021.
10. There were no internet services available at the facility. If the plant operator needs to create a notification for some unit/equipment which is in malfunction or out of service, he needs to call the supervisor by phone to perform it.	Corrected, no date.
12. Anoxic Mixer # 2 (SAP # 1112954) was out of service, its crane was hanging on.	In service. New SAP # 1140796.
13. 13. Anoxic Mixer # 3 (SAP # 1133241) was out of service, the crane's tensor was broken.	In service. New SAP # 1140797.

Findings during the October 31, 2019 CEI	Status at the time of the Off-Site RI on April 29, 2021
14. Anaerobic Mixer # 1 (SAP # 208007) was out of operation.	Corrected on 02/24/2020.
15. Anoxic Mixer # 2 was not included in the AAA-48 Form, it must be added.	Corrected, it was added to AAA-48 Form.

B. The plant's discharge exceeded the effluent limitation for some parameters from January/2020 until December/2020 as follows:

PARAMETER	DATE
BOD, BOD % Removal	January/2020
Enterococci %, Enterococci Geo Mean	February - May/2020
Enterococci %, Enterococci Geo Mean, Copper, TSS % Removal	June/2020
Enterococci %, Enterococci Geo Mean	July - October/2020
Enterococci %	November/2020

C. Equipment unit identified in poor operational conditions or not in service at the time of the EPA's CEI (October 31, 2019) are summarized in the following table:

	Equipment Unit (SAP #)	Date Reported Out of service	Work Order#	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)	RI Findings 04/29/2021
1.	Motor-Blower # 3 (original plant) (1135491)	03/04/2019	10565960	Out of service.	No.	Corrected on 09/16/2020.
2.	NPW Pumps Panel (1138553)	10/29/2019	10606426	Malfunction.	No.	Corrected on 11/01/2019.
3.	Pump/Motor Degritter # 1 (208765)	12/18/2017	10330755	Malfunction.	Yes.	Not corrected. Under Capital Improvement Project.
4.	Pump/Motor Degritter # 2 (208766)	05/29/2017	10455402	Malfunction.	Yes.	Not corrected. Under Capital Improvement Project.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order#	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)	RI Findings 04/29/2021
5. Motor Paddle Drive Degritter # 1 (1133663)	09/25/2019	10600572	Malfunction.	Yes.	Not corrected. Under Capital Improvement Project.
6. Motor Paddle Drive Degritter # 2 (1133664)	09/25/2019	10600528	Malfunction.	Yes.	Not corrected. Under Capital Improvement Project.
7. Filter Press (1107285)	05/18/2018	10453012	Oil leak.	No.	Corrected on 01/15/2021.
8. Transfer Switch (1102977)	03/29/2019	10570063	Out of service.	No.	Corrected on 12/02/2019. New SAP # 1139947.
9. Mixers Control Panel (213039)	09/19/2019	10599687	Malfunction.	No.	Corrected on 05/27/2020.
10. Blower EQ # 1 (208948)	06/08/2018	10533776	Squeaky noise.	No.	Corrected on 06/15/2020.
11. Blower EQ # 2 (208949)	06/09/2019	10399438	Leak. Pulleys.	No.	Corrected on 06/15/2020.
12. Blower BNR # 1 (1104338)	09/12/2017	10584741	Leak. Pulleys.	No.	Corrected on 04/26/2021.
13. Blower BNR # 3 (208946)	05/08/2019	10576721	Squeaky noise.	No.	Corrected 05/06/2020.
	04/04/2018	10550559	Air leak.	No.	Corrected 05/04/2020.
14. Blower BNR # 4 (208947)	04/04/2018	10548057	Air leak.	No.	Corrected 05/04/2020.
15. MCC BNR Room (213035)	04/04/2019	10571356	Magnetics.	No.	Corrected 05/27/2020.
16. Control Panel Sludge Recirculation Pumps (213040)	07/08/2018	10580777	Malfunction.	No.	Corrected 06/17/2020.

^{*}Check when equipment has been out of service or operating with deficiency for more than 6 months.

D. Equipment units identified in poor operational conditions or not in service at the time of the EPA's RI (04/29/2021) are summarized in the following table:

Equipment Unit (SAP #)	Date Reported Out of service	Work Order#	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
1. Blower # 3 (original plant) (208951)	04/26/2021	10690859	Intermittent failure.	No.
2. Blower # 2 (original plant) (208952)	04/20/2021	10690002	Oil,	No.
3. Motor-Blower # 2 (original plant) (1135490)	04/20/2021	10690003	Squeaky noise.	No.
4. Sump Spray Pump (original plant) (1143107)	04/12/2021	10689027	Pipeline corrosion.	No.
5. Degritter panel 1 (213031)	06/04/2020	10640413	CIP.	Yes.
6. Influent pump panel (new plant) (213036)	09/17/2019	10640560	Corrosion.	Yes.
7. Sludge Belt Filter Press. (1107285)	04/07/2021	10681503	PLC.	No.
8. Filter Press Sludge Pumps (1112964)	03/25/2021	10684601	Do not turn on automatic mode	No.
9. Clarifier 2 Transmission (new plant) (209654)	03/16/2021	10686522	Oil leak.	No.
10. Blower BNR # 2 (1136810)	04/07/2021	10688488	Pulleys.	No.
11. Control Panel Sludge Recirculation Pumps (213040)	06/05/2020	Not Available	Panel malfunction.	Yes.
12. Interior illumination (No SAP #)	11/05/2019	10608245	Out of service.	Yes.
13. Exterior illumination (No SAP #)	11/05/2019	10608244	Out of service.	Yes.

Equipment Unit (SAP#)	Date Reported Out of service	Work Order#	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
14. Scum Pump Air Lift (No SAP #)	10/13/2020	10661193	Broken pipeline.	Yes.
15. Equalizer Pump 1 (208445)	06/05/2020	10640522	Out of operation.	Yes.
16. Chlorine Contact Chambers Valves # 2 and # 3 (No SAP #)	04/12/2021	10688976	Malfunction.	No.
17. A/C Office and Laboratory (no SAP)	04/25/2021	10690455	Maintenance	No.

^{*}Check when equipment has been out of service or operating with deficiency for more than 6 months.

V. <u>SAMPLING</u>

The effluent sample was evaluated at the discharge point (Point 001) for the parameters shown below at the time of the inspection:

Effluent Grab Sample Results		
Color	No.	
Floatable Solids	00.0 mL/L	
Turbidity	2.40 NTU	
Residual Chlorine	< 0.02 mg/L	
Temperature	28.4 °C	
Dissolved Oxygen	7.41 mg/L	
pH	7.60 S.U.	



Picture of the effluent sample taken and sent by PRASA at the time of the RI conducted on 04/29/2021 for the Guanica WWTP.

VI. <u>CONCLUSION</u>

The inspection revealed that there were operation units or equipment out of service or under repair. Please note that Part C.5 of Attachment I of the permit requires the permittee to properly operate and maintain all facilities and systems for collection and treatment (and related appurtenances) which are installed or used to achieve compliance.

SUPERVISOR SIGNATURE	DATE
JAIME GELIGA GELIGA Date: 2021,05.05 09:10:09 -04'00'	
INSPECTOR SIGNATURE	DATE
MIGUEL BATISTA Digitally signed by MiGUEL BATISTA Date: 2021.05.05 09:18:20 -04'00'	